5

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## ABSTRACT OF THE DISCLOSURE

Provided is an optical fiber having holes extending along the axis whose transmission loss is substantially reduced and the manufacturing method thereof. First, a plurality of through-holes 9 are formed in a preform 5 extending along the preform axis. Subsequently, the preform 5 is heated by heating means 24 in the furnace preferably for 30 minutes or more at a temperature equal to or more than 800 °C while flowing a dry gas in the through-holes 9. As a result, the OH group which exists on the surfaces of the inner walls 5a of the through-holes 9 of the preform 5 is discharged outside the preform. Subsequently, the preform 5 is drawn into an optical fiber.